

# 33

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**



Appellant(s) : Alexander TUZHILIN et al.

**On Appeal to the Board of  
Appeals and Interferences**

Serial No. : 09/013,490

Examiner: P. Winder

Filed : January 26, 1998

Art Unit: 2155

For : METHOD AND APPARATUS FOR MONITOR AND  
NOTIFICATION IN A NETWORK

**RECEIVED**

DEC 17 2003

Technology Center 2100

**R E P L Y   B R I E F   O N   A P P E A L**

I hereby certify that this paper is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Assistant Commissioner for Patents, P.O. Box 1450, Alexandria,  
VA 22313-1450

September 15, 2003

Date of Deposit

Gary Abelev

40,479

Attorney Name

Registration No.

September 15, 2003

Signature

Date of Signature

## I. INTRODUCTION

On April 21, 2003, Appellants filed an Appeal Brief with the U.S. Patent and Trademark Office (the "Patent Office") appealing the final rejection of claims 38, 39, 41-59 and 61-88 contained in the Final Office Action issued by the Patent Office on November 19, 2002 in the above-identified patent application. On July 11, 2003, the Patent Office (i.e., the Examiner) issued an Examiner's Answer (the "Answer") in response to the arguments provided in the filed Appeal Brief.

In accordance with 37 C.F.R. § 1.194(b)(1), this Reply Brief is submitted in response to the new arguments raised by the Examiner in the Examiner's Answer. For at least the reasons set forth below, Appellants respectfully submit that even in view of the additional arguments raised in the Examiner's Answer, the prior art of record does not render claims 38, 39, 41-43, 50-59, 61-63 and 70-88 anticipated, and claims 44-49 and 64-69 obvious. Accordingly, the final rejection of pending claims 38, 39, 41-59 and 61-88 should be reversed.

## II. REPLY TO EXAMINER'S COMMENTS ON ISSUES ON APPEAL

### ISSUE A

**Group I – Claims 38, 39, 41, 50-52, 54, 56, 58, 59, 61, 70-72, 74, 78 and 80-88**

As discussed in the Appeal Brief, Appellants' invention, as recited in independent claim 38, relates to an apparatus for monitoring information on a network. The apparatus comprises, *inter alia*:

a storage device storing a predefined criterion, and having a monitoring module thereon; and

a processing device executing the monitoring module to transmit at least one instruction to the network, the at least one instruction being executed on the network and requesting a performance of a monitoring operation to monitor the information on the network as a function of the predetermined criterion, the processing device is adapted to receive data from the network based on at least one result of the monitoring operation . . . .

Independent claims 52, 80 and 83 relate to apparatuses, independent claims 58, 72, 78 and 82 relate to methods, and independent claim 86 relates to a software arrangement which include similar recitations.

In the Answer, the Examiner states that U.S. Patent No. 5,809,238 issued to Greenblatt et al. (the "Greenblatt Patent") teaches that "the DataProbe comprises 'inquiry instructions' and it is launched (i.e., transferred to the network)." (See Answer, page 14, last 2 lines). In support of this allegation, the Examiner points to column 5, lines 52-62 of the Greenblatt Patent, and quotes therefrom that "when DataProbe is initiated or launched, the DataProbe transfers a request initiating the operation of a data collection application ... and the return of the resultant data to the DataServer platform for return to the user in the form of one or more rows of columnar data." (See Answer, page 14, last paragraph). Indeed, as a result of launching of a DataProbe 16 of the Greenblatt Patent, the requested data once collected by the networked platform P1's data collection application is then returned via a transport network 12 to the DataProbe 16 for storage in DataTable 26. (See Greenblatt Patent, column 6, lines 14-19). Thus, the DataProbe 16 is launched or initiated to transfer a request to the networked platform P1 to obtain data, which returned to the DataProbe 16. In this manner, the Examiner attempts to equate the transmission of at least one instruction to the network (i.e., by the DataProbe 18 of the Greenblatt Patent to the networked platform P1), and an

execution of such instruction on the network (i.e., by the networked platform P1) to the recitations provided in independent claims 38, 52, 58, 72, 78, 80, 82, 83.

Then, however, the Examiner states that the computer network 10 of the Greenblatt Patent includes the DataServer 14, which includes a plurality of probes (i.e., DataProbes 18), and that these "probes 18 and the filter of the DataServer 14 are responsible for determining whether certain conditions have occurred ..." (See Answer, page 15, lines 6-12). The Examiner further concludes that the DataServer 14 "provides [sic] 'on the network' and the 'operation of data collection' provides the monitoring." In this manner, the Examiner apparently alleges that the Greenblatt Patent discloses the monitoring operation recited in independent claims 38, 52, 58, 72, 78, 80, 82, 83 and 86.

As an initial matter, contrary to the Examiner's assertion, the *mere operation of data collection* cannot be equated to the monitoring operation as recited in independent claims 38, 52, 58, 72, 78, 80, 82, 83 and 86. The term - data collection – only means that an accumulation of the data, while the meaning of the monitoring operation can be referred to as an operation in which the data is watched, observed or checked. (See Webster's Ninth New Collegiate Dictionary, pp. 259 and 767, Merriam-Webster Inc., 1989). Therefore, the Examiner's apparent association of the collection of data described in the Greenblatt Patent to the monitoring operation as recited in independent claims 38, 52, 58, 72, 78, 80, 82, 83 and 86 is improper.

Further, the Greenblatt Patent discloses that the request for data is transmitted from the DataProbe 18 of the DataServer 14 to the networked platform P1 via the network. Even if the DataServer 14 is provided on the network, the instructions

allegedly transmitted by the DataProbe 18 to the networked platform P1 of the Greenblatt Patent are executed by the platform P1 to retrieve the rows of columnar data, and then such data is forwarded to the DataServer 14. However, such request for data (sent by the DataProbe 18) in no way request the performance of any monitoring operation on the networked platform P1. In summary, contrary to the Examiner's belief, Appellants respectfully assert that the instructions allegedly transmitted by the DataProbe 18 of the DataServer 14 of the Greenblatt Patent and allegedly executed by the networked platform P1 do not request the performance of any monitoring operations, as explicitly recited in independent claims 38, 52, 58, 72, 78, 80, 82, 83 and 86.

Furthermore, on page 21 of the Answer, the Examiner apparently believes that the instructions allegedly sent by the DataProbe 18 of the DataServer 14 of the Greenblatt Patent performs the monitoring operation after its receipt of the data from the networked platform P1, which is provided in the form of rows of columnar data. Then, the Examiner alleges that "upon a predicate test being positive[,] the results are notified to the user application U1 which communicates with the DataServer 14 via transport network." (See Answer, page 21, lines 15-17). Thus, the DataProbe 18 of the DataServer 14 transfers a request to the network, while the user application (which is separate from the DataServer 14) receives the results upon a predicate test being positive.

In clear contrast to the disclosure of the Greenblatt Patent, according to Appellants' invention recited in independent claims 38, 52, 58, 72, 78, 80, 82, 83 and 86, the same processing device (apparently equated by the Examiner to the DataServer

14 of the Greenblatt Patent) executes a monitoring module to transmit at least one instruction on the network, and then receives the result based on the monitoring operation executed on the network. In summary, the processing device recited in independent claims 38, 52, 58, 72, 78, 80, 82, 83 and 86 is **both used to (i) transmit the instruction to the network, and (ii) receive the results based on the monitoring operations**, while the DataServer 14 of the Greenblatt Patent may use its DataProbes 18 to transmit the instructions to the network, but does not receive the results based on the monitoring operation. In fact, the Examiner is forced to point to the user application U1 (which is separate from the DataServer 14) for such alleged receipt of the results in the Greenblatt Patent.

### **Group II – Claims 42 and 62**

Independent claims 42 and 62 relate to apparatus and method for monitoring information on a network, respectively, which include substantially the same recitations as provided above with reference to independent claims 38, 52, 58, 72, 78, 80, 82, 83 and 86. Accordingly, independent claims 42 and 62 are believed to be patentable over the Greenblatt Patent for the same reasons as provided above with reference to independent claims 38, 52, 58, 72, 78, 80, 82, 83 and 86.

In addition, independent claims 42 and 62 also recite that **the predefined criterion is a rule-based criterion which enables the monitoring operation to monitor for the at least one event on the network and to check if a certain condition of the at least one condition is satisfied**. In the

Answer, the Examiner states that the "predicate being tested [as allegedly described in the Greenblatt Patent] is taught to be conditionally testing [sic] required by appellant's claim. (See Answer, page 22, lines 11-12).

However, Appellants respectfully assert that these claims explicitly recite that the monitoring operation includes (i) the monitoring of the event, and (ii) the determination that the condition is satisfied (which is separate from the monitoring of the event). The Examiner only equates the predicate testing to a conditional testing, but does not point to any section of the Greenblatt Patent to disclose that two separate and distinct actions are taking place (i.e., the monitoring of the event *and* the determination that the condition is satisfied).

In the Answer, the Examiner further states that the event has occurred (apparently tested by the DataServer 14 of the Greenblatt Patent) "because the predicate test was positive." (See Answer, page 23, lines 12-13). However, Appellants respectfully assert that the events and the conditions recited in independent claims 42 and 62 are separate and distinct, and no associations are provided therebetween in these claims. Accordingly, it is respectfully submitted that even if the Greenblatt Patent discloses the monitoring for events, this publication in no way discloses both the monitoring of the event and the determination of the conditions, as recited in independent claims 42 and 62.

### Group III – Claims 43 and 63

Claims 43 and 63 depend from independent claims 42 and 62, respectively. Accordingly, claims 43 and 63 are believed to be patentable for the same reasons as provided above with reference to independent claims 42 and 62.

In addition, Appellants' invention of claims 43 and 63 recite that the rule-based criteria includes an IF portion and/or a WHEN portion, and a **THEN portion (of a rule-based criteria) includes a probing action which has at least one probing operator**. In the Answer, the Examiner points to column 15, lines 18-20 of the Greenblatt Patent as allegedly disclosing that the DataProbe 18 "provides the 'exploratory investigation'." (See Answer, page 24, lines 5-6).

However, the invocation of the DataProbe 18 by the DataServer 14 of the Greenblatt Patent is performed as part of a transmission of the instructions, and thus can only be associated with (if at all) with the IF portion or the WHEN portion of the criteria recited in claims 43 and 63. However, the Greenblatt Patent does not perform any probing in the THEN portion of the rule-based criteria after the execution of the instructions of the WHEN portion or the IF Portion, as provided in claims 43 and 63. It should be understood that any execution of probing action in the THEN portion occurs after the execution of the instructions or actions in the IF portion and/or the WHEN portion. Therefore, the Greenblatt Patent does not disclose that the THEN portion includes a probing action, as recited in claims 43 and 63.

**Group IV – Claim 53 and 73**

Independent claims 53 and 73 relate to apparatus and method for monitoring information on a network, respectively, which include substantially the same recitations as provided above with reference to independent claims 38, 52, 58, 72, 78, 80, 82, 83 and 86. Accordingly, independent claims 53 and 73 are believed to be patentable over the Greenblatt Patent for the same reasons as provided above with reference to independent claims 38, 52, 58, 72, 78, 80, 82, 83 and 86.

In addition, independent claims 53 and 73 also recite that **the result includes a copy of a portion of at least one monitored predicate**. In the Answer, the Examiner apparently the DataServer 14 of the Greenblatt Patent (apparently equated by the Examiner to Appellants' claimed processing device) only receives the rows of columnar data, and then performs certain processing on the received data to obtain a result. Thus, the DataServer 14 only generates the processed results, and forwards such results to the user application U1. However, the Greenblatt Patent in no way discloses that **the processing device is adapted to receive data from the network based on the result of the monitoring operation (much less that such result includes at least one monitored predicate)**, as explicitly recited in independent claims 53 and 73.

**Group V – Claims 55 and 75**

Claims 55 and 75 depend from independent claims 38 and 58, respectively. Accordingly, claims 55 and 75 are believed to be patentable for the same reasons as provided above with reference to independent claims 38, 52, 58, 72, 78, 80, 82, 83 and 86.

In addition, Appellants' invention of claims 43 and 63 recite that **at least one event includes an atomic event and/or a combination of events**. In the Answer, the Examiner contends that "the rules are composed of atomic events evidenced by the event function EVENT() ...," and refers to column 8, lines 42-52 to support this allegation (See Answer, page 27, lines 4-5). These claims recite that the event includes an atomic event and/or a combination of events, and does not indicate that the rule "is composed of atomic events." It is clear from column 7, lines 7-25 of the Greenblatt Patent that the rules described therein do not contain events. Indeed, the Greenblatt Patent describes the event as being a part of an SQL statement. ( See Greenblatt Patent, column 6, lines 65-68, column 7, line 1; column 7, lines 27-30, and column 8, lines 42-48). Accordingly, the Greenblatt Patent in no way discloses that the event includes the atomic event and/or a combination of events, as recited in claims 53 and 73.

**Group VI – Claims 57 and 77**

Claims 57 and 77 depend from claims 43 and 63, respectively. Accordingly, claims 57 and 77 are believed to be patentable for the same reasons as provided above with reference to claims 43 and 63.

**Group VII – Claims 84 and 85**

Claims 84 and 85 depend from independent claims 38 and 58, respectively. Accordingly, claims 84 and 85 are believed to be patentable for the same reasons as provided above with reference to independent claims 38, 52, 58, 72, 78, 80, 82, 83 and 86.

**ISSUE B****Group I – Claims 44 and 64**

Claims 44 and 64 depend from claims 43 and 63, respectively. Accordingly, claims 44 and 64 are believed to be patentable for the same reasons as provided above with reference to claims 43 and 63.

In addition, Appellants' invention of claims 43 and 63 recite that **the probing operator includes a data mining query**. In the Answer, the Examiner apparently believes that U.S. Patent No. 6,134,555 issued to Chadha et al (the "Chadha Patent") discloses data mining queries. However, the sections of the Chadha Patent relied on by the Examiner only mention data mining in processes, but do not disclose any data mining queries. As is known in the art, the data mining queries are queries (e.g., retrieval requests) which are performed on a set of data mining rules previously discovered as apart of the data mining discovery process. The Chadha Patent only relates to the dimensionality reduction problem which is not directed to data mining queries. Thus, Appellants respectfully assert that there is absolutely no teaching or suggestion in these portions of the Chadha

Patent or in any other section thereof of the probing operator which includes a data mining query.

In addition, Appellants respectfully assert that the Greenblatt patent provides absolutely no *teaching, suggestion, motivation or incentive* to utilize data mining techniques in its monitoring system. Indeed, there is no need to use any data mining techniques for the procedure executed by the probe 18 and the filter 36 of the Greenblatt Patent. Indeed, nothing in the Greenblatt Patent provides any need or preference for such combination with the Chadha Patent. Thus, the disclosure of the Greenblatt Patent would not teach or suggest to one having ordinary skill in the art to combine it with prior art data mining systems or methods.

### Issue C

#### Group I – Claims 45-47 and 65-67

Claims 45-47 depend from claims 43, and claims 65-67 depend from claim 63. Accordingly, claims 45-47 and 65-67 are believed to be patentable for the same reasons as provided above with reference to claims 43 and 63. This is also because U.S. Patent 5,893,091 issued to Hunt et al. (the "Hunt Patent") does not cure the deficiencies of the Greenblatt Patent to teach or suggest Appellants' invention as recited in claims 43 and 63, nor does the Examiner contends that it does.

**Issue D****Group I – Claims 48, 49, 68 and 69**

Claims 48 and 49 depend from claims 46, and claims 68 and 69 depend from claim 66. Accordingly, claims 48, 49, 68 and 69 are believed to be patentable for the same reasons as provided above with reference to claims 46 and 66. This is also because A. Prasad Sistla et al., "Temporal Conditions and Integrity Constraints in Active Database Systems" (the "Sistla Publication") does not cure the deficiencies of the Greenblatt Patent to teach or suggest Appellants' invention as recited in claims 46 and 66, nor does the Examiner contends that it does.

Appellants also respectfully again assert that this rejection is improper due to the fact that claims 46 and 66 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Greenblatt Patent, in view of the Hunt Patent. In the Answer, the Examiner apparently believes that Applicants only argument for these claims is that there is no teaching or suggestion to combine the references, and does not even address the fact that the elements recited in these claims, which the Examiner admitted as being absent from the Greenblatt Patent, are not present in the Sistla Publication.

In particular, in the Final Office Action, the Examiner admitted that the Greenblatt Patent lacks certain subject matter, and thus was required to combine it with the Hunt Patent to form a combination which the Examiner believes teaches or suggests the recitations provided in claims 46 and 66 (i.e., Issue C, Group I). Even though claims 48 and 49, and claims 68 and 69 depend from and therefore include all of the recitations of claims 46 and 66, respectively, the Examiner did not reject 48, 49, 68

and 69 under 35 U.S.C. § 103(a) as being unpatentable over the Greenblatt Patent, in view of the Hunt Patent. Thus, Appellants again respectfully assert that for the additional reason that the subject matter recited in claims 46 and 66 was **admitted by the Examiner as being absent** from the Greenblatt Patent, and because the Sistla Patent does not cure such deficiency, Appellants respectfully assert that the subject matter recited in claims 48, 49, 68 and 69 is also not taught or suggested by the alleged combination of the Greenblatt Patent and the Sistla Publication.

### III. CONCLUSION

For at least the reasons indicated above, Appellants further respectfully submits that the invention recited in the claims of the present application, as discussed above, is new, non-obvious and useful. Reversal of the Examiner's rejections of all pending claims in this application is therefore respectfully requested.

Respectfully submitted,

Dated: September 15, 2003

By:



Gary Abelev  
Patent Office Reg. No. 40,479

Attorneys for Appellant(s)  
Baker Botts L.L.P.  
30 Rockefeller Plaza  
New York, NY 10112  
Telephone: (212) 408-2522